

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of depositing $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$, where $0 < x < 1$, onto a substrate, in a MOVPE technique, where $0 \leq x \leq 1$; comprising the step of reacting together ~~isopropylallyltelluride~~ a volatile organotellurium compound, and one or both of (i) a volatile organocadmium compound and (ii) mercury vapourvapor, wherein $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ is grown by an interdiffused multilayer process involving the alternate growth of cadmium telluride and mercury telluride layers, which are then interdiffused to produce $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$; ~~characterised in that the organotellurium compound is isopropylallyltelluride and in that~~ and wherein the substrate is maintained at a temperature in the range 150°C to 350°C.

2. (Original) A method of depositing $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ according to Claim 1 wherein the organocadmium compound is an alkyl cadmium compound.

3. (Original) A method of depositing $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ according to Claim 2 wherein the alkyl cadmium compound is dimethyl cadmium.

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Original) A method of depositing $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ according to Claim 1 wherein the substrate comprises glass, or glass coated with indium tin oxide, or CdTe, or CdZnTe, or GaAs, or GaAs/Si, or CdTe/GaAs, or Si.

9. (Original) A method of depositing $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ according to Claim 1 wherein the temperature of the substrate is maintained at a temperature in the range 150°C to 300°C.

10. (Original) A method of depositing $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ according to Claim 9 wherein the temperature of the substrate is maintained at a temperature in the range 250°C to 300°C.

11. (Previously amended) A method of fabricating an electronic device comprising the steps of (a) depositing $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ onto a substrate by a method according to Claim 1; and (b) connecting at least two electrodes to the $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$.

12. (Original) A method of fabricating an electronic device according to Claim 11 wherein the method further comprises the step of doping the $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$.

13. (Currently amended) A method of fabricating an electronic device according to Claim 11 wherein the method comprises the further step of doping the $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ material in such a manner that a p-n junction is formed.

14. (Previously amended) A method of fabricating a device according to Claim 11 wherein the method further comprises the step of growing a passivating layer of CdTe on the $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (New) A method of depositing $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ according to Claim 1, wherein the cadmium telluride layer is deposited in the presence of mercury vapor.